

#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20666

February 26, 1981

ALL CONSTRUCTION PERMIT HOLDERS AND APPLICANTS FOR OPERATING LICENSES

Gentlemen:

RE: PERIODIC UPDATING OF FINAL SAFETY ANALYSIS REPORTS (FSARS)

(GENERIC LETTER 81-06)

The Commission approved the rule 50.71(e) (copy enclosed) entitled. "Periodic Updating of Final Safety Analysis Reports" and published the rule in the Federal Register on May 9, 1980. The rule became effective on July 22. 1980.

Although this new rule applies to holders of operating licenses for power reactors, we believe your organization should be aware of it, since, within 24 months after issuance of an operating license or July 22, 1982, whichever is later, the original FSAR submitted as a part of the OL application must be updated in the specific manner provided in the rule. Thereafter, it must be updated at least annually. Each update must reflect all changes up to six months prior to the filing of the update.

Although the rule itself is self-explanatory, several questions have been asked regarding the FSAR's legal status, format and content, and we have provided the enclosed guidance.

Further questions should be directed to the Project Manager for your facility.

incerely.

Darrell G. Eisenhut, Director

Division of Licensing

Enclosure: As stated

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

Periodic Updating of Final Safety Analysis Reports

AGENCY: U.S. Nuclear Regulatory Commission

ACTION Float rule.

SUMMARY: The Nuclear Regulatory Commission is amending its regulations to require each person licensed to operate a nuclear power reactor to submit periodically to the Commission revised pages for its Final Safety Analysis Report (FSAR). These revised pages will indicate changes which have been made to reflect information and anelyses submitted to the Commission or prepared as a result of Commission requirement. The emendment is being made to provide an updated reference document to be used in recurring safety analyses performed by the licensee, the Commission, and other interested parties.

EFFECTIVE DATE July 22, 1980.

Note.—The Nuclear Regulatory
Commission has submitted this rule to the
Comptroller General for such review as may
be appropriate under the Federal Reports
Act. as amended, 44 U.S.C. 3312. The date on
which the reporting requirement of this rule
becomes effective, onless advised to the
contrary, accordingly, reflects inclusion of the
48-day period which that sits rule allows for
such review (44 U.S.C. 3312(c)[2]).

FOR FURTHER INFORMATION CONTACT:
Mr. Morton R. Fleishmen. Office of
Standards Development. U.S. Nuclear
Regulatory Commission. Washington.
D.C. 20555, telephone 301-443-5821.

SUPPLEMENTARY INFORMATION ON November & 1976, the Nuclear Regulatory Commission published in the Federal Register (41 FR 40123) a notice of proposed rule making inviting written suggestions or comments on the proposed rule by December 23, 1976. A notice of correction and extension of comment period was published in the Federal Register on December 27, 1978 [41 FR 58204) in which the comment period was extended to Jenuary 28, 1877. The notices concerned proposed amendments to 10 CFR Part SO. "Licensing of Production and Utilization Facilities," to require each applicant for, or holder of, a power reactor operating license which would be or was issued after January 1, 1983 to submit periodically to the Commission revised pages for its Final Safety Analysis Report (FSAR). These revised pages would indicate changes made in the facility or the procedures for its operation and any analyses affected by these changes. Thirty-one persons submitted comments regarding the proposed amendments. The commenters could be roughly divided into three groups with seventeen supporting the rule with comments, eleven opposed to the rule, and three neutral Copies of the comments received may be examined in the Commission's Public Document DOD at 1717 H Street NW. Washington, D.C.

The substantive areas of comment can be categorized generally as follows:

1. Cardication of Rale 2. Applicability of Rale

1. Content of FSAR 4. Scope of Rale

6. Timing of Sobmittals 6. Relation of Rais to Other Rules and

Fanoria
7. Legal Status of Updated FSAR
8. Cost/Benefit of Rule

In response to the comments received, the Commission is modifying the role to [a] eximal its applicability to all power reactors licensed to operate, (b) exclude applicants for operating licenses. (c) clarify the wording of the rule. (d) reduce its impact on power reactor licensess by relexing some of the time requirements, and (e) require the initial revision to be a complete FSAR.

When the proposed rule was published for public comment, its applicability was limited to those plents licrased after January 1, 1963 in order to exampt five (5) older fecilities. The Commission believed that it would not be feasible for these licensess to implement the rule because there is no integrated document comparable to an FSAR for their fecilities. Since publication of the proposed rule, the Commission has initiated a program in

which the NRC staff is making a systematic safety evaluation of elevan (11) nuclear power facilities licensed for operation before 1972. The purpose of this systemat c evaluation program (SEP) is to determine and document the degree to which the eleven (11) fecilities meet current licensing requirements for new plants. Of the five (5) plants licensed prior to January 1, 1983 that are etili licensed to operate, three (3) are included in the SEP. The remaining two (2) plants, which presently ere shut down, w be subject to the p visions of the rule as long as their licenses authorize operation.

The licensees participating in the SEP probably will be requested to supply a considerable amount of information during the program. Requiring them, in addition to update their FSARs could prove to be excessively burdensome and could result in duplication of reports. The information generated during the program and the manner in which It is colleted will result in a completed FSAR at the conclusion of the program. For these reasons licensees of facilities being subjected by the NRC to a systematic evaluation program will not be required to comply with the provisions of this rule until they are notified by letter by the NRC's Director of the Office of Nuclear Reactor Regulation that, for their particular facility, the program has been completed Because of the considerations just mentioned, that part of the proposed rule which limited the applicability to facilities licensed after January 1, 1963 has been deleted and the rule will apply to all power reactors licensed to operate.

The FSAR required to be updated by the rule is the original FSAR submitted es part of the application for the operating license. It would not include the subsequent supplements and amendments to the FSAR or the license that may have been submitted either in response to NRC questions or on the applicant's or licensee's own initiative following the original submittal. These various supplements and amendments must be appropriately incorporated into the original FSAR to create a single. complete and integral document. The initial revision to be filed should contain those peges from the originally submitted FSAR that are still applicable plus new replacement pages that appropriately incorporate the effects of supplements, amendments and other changes that have been made. This will result in a single, complete document

<sup>\*</sup>The two facilities are Indian Point Unit No. 1

being filed, that can then serve as the baseline for future changes.

Commenters have asked about the proper format to be used when making the FSAR submittel. Since the format of the FSAR is not covered by regulation. the rule does not specify a particular format. The NRC staff has provided guidance for the preperation of FSARs in Regulatory Guide 1.70, Revision 2 "Standard Formet and Content of Safety Analysis Reports for Nuclear Power Plants" However, many FSARs were developed prior to any specific guidance on format. The format to be used for the FSAR revisions is the option of the licensee, but the Commission expects that the format will probably be the same as the format of the original FSAR. No analyses other than those already prepared or submitted pursuant to NRC requirements (either originally with the application, or as part of the operating license review process, or as required by \$ 50.59 or other NRC requirement or to support license amendments) are required to be performed by the licensee because of this rule. However, analyses existing in the FSAR which are known to be inaccurate or in error as a result of new enalyses performed by the licensee pursuant to NRC requirements, would have to be revised. Specialized studies provided in the FSAR such as on volcanic hezards or quality sesurance. should include the latest information that has been developed in response to NRC requirements, New analyses (La., analyses not previously included in FSAR) which were required during consideration of overiewed safety questions, 1 technical specification changes, or other licensing questions. mey be incorporated as appendices or otherwise appropriately inserted within the FSAR

Program type material that is

referenced by the FSAR, such as the
Quelity Assurance Program or the
Emergency Plan, should be referenced
accurately, if such material has been
revised or amended, the latest revision
should be referenced. A description of
physical changes to the facility should
be included in the update after the
changes have bean approved for use and
are operable. The level of detail to be
maintained in the updated FSAR should

be at least the asme as originally provided. Minor differences between actual and projected population figures or other such changes in the site environment need not be reported unless the conclusions of safety analyses relative to public beatts end safety are affected and the licensee has prepared new analyses as a result of NRC requirements.

Commenters have questioned the relation of the proposed FSAR updating requirements to other reporting requirements such as the Annual Operating Report and \$ 50.59(b) reporting, it is not the Commission's intention to require submittal of duplicative reports. The Commission is eliminating the requirement for the Annual Operating Report. This will reduce significantly the reporting burden of liceasees. There bas been no requirement that \$ 50.59(b) reporting be part of the licensee's Annual Operating Report This information generally bas been included in the Annual Operating Report as a convenience, but it could have been submitted separately and the licensee still would have complied with \$ 50.59(b) which merely requires reporting "annually or at such shorter intervals as may be specified in the license." Furthermore, the report required under \$ 50.59(b) is only "e brief description of such changes, tests, and experiments, including a summery of the safety evaluation of each." The § 50.59(b) reporting may not be detailed sufficiently to be considered adequate to fulfill the FSAR updating requirement. The degree of detail required for updating the FSAR will be generally greater than a "brief description" and a "summary of the safety avaluation." However, there is nothing that precludes submitting the \$ 50.59(b) report along with the FSAR update submittal and thus satisfy \$ 50.39(b) along with 1 50.71(e). Parts of the FSAR submittal may be referenced by the \$ 50.59(b) Proort.

Several commenters have raised legal questions coocerning the proposed rule including questions relative to the purpose of the rule, the implication concerning re-reviews. the status of completed bearings, and prior license approvals. The rule is only a reporting requirement to insure that an updated FSAR will be available. Submittel of updated FSAR pages does not constitute a licensing action but is only intended to provide information. It is not intended for the purpose of re-reviewing plants. Matters which have been considered previously during hearings will not be reconsidered as a result of the FSAR submittals. Thus, for example, approvals of license amendments and technical specification changes are independent of the FSAR updating process and once approved would not be subject 'o further consideration simply because the FSAR is updated. This. of course. does not preclude the reevaluation of previous positions based on new Information or new considerations. The material submitted may be reviewed by the NRC staff but will not be formally approved. The new pages will be accepted as representing the licenses's position at the time of submittal and will be utilized in any subsequent reviews or NRC stall activities concerning that

After consideration of the comments that were received and other factors, the Commission has adopted the amendment to Pert 50 as set forth below.

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and section 553 of title 5 of the United States Code, the following amendment to 10 CFR Part 50 is published as a document subject to codification.

#### PART 50—DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

Section 50.71 is amended by adding a new paragraph (e) to read as follows:

# § 50.71 Maintenance of records, making of reports.

(e) Each person licensed to operate a nuclear power reactor pursuant to the provisions of \$ 50.21 or \$ 50.22 shall update periodically, as provided in paragraphs (e)(3) and (e)(4) of this section, the final safety analysis report (FSAR) originally submitted as part of the application for the operating license. to essure that the information included in the FSAR conteins the latest material developed. This submittel shall contain all the changes necessary to reflect information and analyses submitted to the Commission by the licensee or prepared by the licensee pursuant to Commission requirement since the submission of the original FSAR or, as appropriate, the last updated FSAR. The ppdated FSAR shall be revised to include the effects of: all changes made in the facility or procedures as described in the FSAR: all pafety evaluations performed by the licensee either in support of requested license amendments or in support of conclusions that changes did not involve an unreviewed safety questions and all analyses of new safety issues performed by or on beball of the licensee at

<sup>&</sup>quot;As defined in § 20.00 [2]. "A proposed change, lest, or apprenent shall be derimed to involve an authorized selety question (i) if the probability of occurrance or the consequence of an actident or mailunction of equipment important to safety previously evaluated in the safety analysis reportingly or subsect of the safety analysis report may be increased or (ii) if a possibility for an excitant or multimodes of a different type than any evaluated previously in the entry analysis report may be created or (iii) if the margin of safety as defined in the basis for any inclination in reduced."

Commission request. The updated information shall be appropriately located within the FSAR.

(1) Revisions containing updeted information shall be submitted on a replacement-page basis and shall be accompanied by a list which identifies the current pages of the FSAR following page replacement. One signed original and 12 additional copies of the required information shall be filled with the Director of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

(2) The submittal shell include (i) a certification by a duly authorized officer of the licensee that either the information accurately presents changes made since the previous submittal, necessary to reflect information and analyses submitted to the Commission or prepared pursuent to Commission requirement, or that no such changes were made: and (ii) an identification of changes made under the provisions of \$50.59 but not previously submitted to the Commission.

(3)(i) A revision of the original FSAR containing those original pages that are attil applicable plus new replecement pages shall be filed within 24 months of either July 22, 1980, or the data of issuance of the operating licensa, whichever is later, and shall bring the FSAR up to date as of a maximum of 6 months prior to the date of filing the

revision

(ii) Not less than 15 days before \$ 50.71(e) becames effective, the Director of the Office of Nuclear Reactor Regulation shall notify by letter the licensees of those nuclear power plants initially subject to the NRC's systematic evaluation program that they need not comply with the provisions of this section while the program is being conducted at their plant. The Director of the Office of Nuclear Reactor Regulation will notify by letter the licensee of each nuclear power plant being evaluated when the systematic evaluation program has been completed. Within 24 months after receipt of this notification, the licensee shell file a complete FSAR which is up to date as of a maximum of 6 months prior to the date of filing the

(4) Subsequent revisions shell be filed no less frequently than annually and shall reflect all changes up to a maximum of 6 months prior to the date

of Illing.

(5) Each replacement page shall include both a change indicator for the area changed, e.g., a bold line vertically drawn in the margin adjacent to the portion actually changed, and a page change identification (date of change or change number or both).

(Sec. 181b., Pub. Law 83-703, 86 Sint. 648, Sec. 201. Pub. Law 63-438, 86 Sint. 1242 [42 U.S.C. 2201(b), 5641]).

Dated at Washington, D.C., this 1st day of May 1980.

For the Nuclear Regulatory Commission. Samuel J. Chills, Secretary of the Commission.

FR Date ID-1410 Filed 6-4-00 6-00 and

## Questions and Responses Concerning FSAR Update Rule

#### A. REGULATORY/LEGAL

 Question: Is the updated FSAR part of the licensed basis of the plant? That is, can the original FSAR, as amended, be set aside and forgotten or is the license still based upon it? E.g., for reporting to NRC of deviations from conditions stated in the "FSAR," which one applies.

Response: The original FSAR, as amended, is still considered to be the licensing basis for the plant. However, as indicated in the rule, the updated FSAR "shall contain all the changes necessary to reflect information and analyses submitted to the Commission....since the submission of the original FSAR...." Furthermore, the rule requires certification by the licensee that the "information accurately presents changes made since the previous submittal, necessary to reflect information and analyses <u>submitted</u> (emphasis added) to the Commission...." and an identification of changes made under 10°CFR § 50.59. The NRC intends to use the updated FSAR in the future for appropriate applications such as reporting of deviations from conditions stated in the "FSAR."

If, as a result of possible audits, the NRC finds that the updated FSAR is not as certified to by the licensee, appropriate enforcement action would be taken.

- Question: Is the updated FSAR to be called the FSAR?
  Response: The original FSAR and the docket file is the final authority if a discrepancy exists although the updated FSAR, which will be referred to as the updated FSAR, will provide the most convenient reference.
- 3. Question: Who receives update? E.g., do parties to the original proceeding, libraries, etc., receive a copy?

  Response: As indicated in the rule, the licensee is only required to send the updated FSAR to the NRC. There is no intention to send copies to parties to the original proceeding, unless such copies are requested in accordance with Commission regulations. It is planned to place copies of the updated FSAR in the local public document room, the public document room in Washington, D. C. the Technical Information Center and the Nuclear Safety Information Center.
- specification basis?

  Response: The bases for the technical specifications are included along with the technical specifications. If the technical specifications have referenced the FSAR, they may continue to reference the updated FSAR.

Question: In the future can the FSAR be used as the technical

4.

5. Question: If environmental information (Chapter 2) has changed, is the ER or EIS affected in any way? <u>Response</u>: The rule applies only to the FSAR. The rule imposes no requirement to revise or update the Environmental Report or Environmental Impact Statement. If a change was required, it would be as a result of other regulations. 6. Question: Relative to the frequency of the updating, what do the words "no less frequently than annually" mean?
Response: The time interval between submittals should not exceed
12 months.

#### B. FORMAT

- 1. Question: For multiple unit stations with multiple FSARs:
  - Can they be combined into one FSAR, possible with colored pages?
  - Must the format for each FSAR be the same?

Response: To the extent that the plants on a multi-unit sitz are similar and have a good deal of identical information in their FSARs, the FSARs can be combined into a single updated FSAR, for convenience, with differences appropriately identified.

The formats for each updated FSAR do not have to be the same. As indicated in the supplementary information, the format to be used is the option of the licensee.

 Question: Do original questions and responses have to be maintained in any particular format, or at all?

Response: The original questions and the responses that were submitted remain in the docket file as part of the record. The responses to the questions should be appropriately incorporated into the "body" of the updated FSAR. No separate section is required. Question: Is the initial submittal of the updated FSAR treated as a rovision of the original and numbered sequentially following the last revision or amendment? Response: The initial submittal of the updated FSAR should be treated as a unique document and called the updated FSAR and not as a sequential revision of the original FSAR. Subsequent changes should be considered revisions to the updated FSAR and should be ~

Question: Are change bars and revision numbers required on the initial update or is it a "clean" document? Response: The initial updated FSAR should be a "clean" document without change bars and revision numbers. The subsequent annual revisions would then include the change indicators and page change identification.

numbered starting with revision No. 1.

5. Question: Can the initial updated FSAR be a complete, new, FSAR without retaining the old pages? Response: The initial updated FSAR may be a completely new document without any of the original pages.

#### C. CONTENT

3.

1. Question: Is the "drawing package" considered part of the FSAR? Does it need to be updated? Response: The "drawing package" is not considered part of the FSAR.

Only the drawings that are included in the FSAR should be updated.

 Question: Can one eliminate information no longer applicable to an operating plant ~ e.g., initial training program, start-up test program, etc., assuming it is in the original FSAR? (Also construction QA program)

Response: Information pertaining to programs described in the original FSAR with amendments, such as the initial training program and the preoperational test program, should be submitted as part of the initial updated FSAR for completeness. The intent here is to locate previously submitted information in one document. Submission of new information is not required. The proposed technical specifications may be eliminated since they have been superseded by technical specifications issued by the Commission.

- 3. Question: If the original FSAR is in Regulatory Guide 1.70 format, do comparisons (e.g., to other plants) in Chapter 1 have to be updated? <a href="Response">Response</a>: The only changes that should be made should be to include all material submitted to the NRC. Only an administrative update is required. The licensee should point out that the comparison was considered valid at the time the operating license was issued.
- 4. Question: Will Security and Emergency Plans (Chapter 13) be treated separately?

Response: The updated FSAR should reference the Security and Emergency Plans that are currently in effect.

- 5. Question: Assuming portions of the plant or systems have been modified and designed to codes then currently in effect, how is this addressed in the update?
  Response: Identify whatever codes have actually been used to design or modify the plant. If older codes were used for certain parts of the plant, it should be so indicated.
- 6. Question: Assuming the original FSAR contains references that are no longer in use or acceptable in industry, must they be changed and the affected analysis revised accordingly? (For example, reference to a Corps of Engineers Technical Document on wave height analysis.)

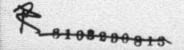
  Response: New analyses do not have to be performed and new references do not have to be incorporated just to comply with this rule.

  Analyses should be revised if safety (i.e., 10 CFR \$ 50.59) or other considerations require such revision.

## PLANTS UNDER OL REVIEW

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# PLANTS UNDER CONSTRUCTION

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#### ALL POWER REACTOR LICENSEES

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Docket No. 50-318
Calvert Cliffs Unit 2

Docket No. 50-293 Pilgrim Unit 1

Docket No. 50-325 Brunswick Unit 1

Docket No. 50-324 Brunswick Unit 2

Docket No. 50-261 H. B. Robinson Unit 2

Docket No. 50-10 Dresden Unit 1

Docket No. 50-237 Dresden Unit 2

Docket No. 50-249 Dresden Unit 3

Docket No. 50-254 Quad-Cities Unit 1

Docket No. 50-265 Quad-Cities Unit 2

Docket No. 50-295 Zion Unit 1

Docket No. 50-304 Zion Unit 2

Docket No. 50-213
Connecticut Yankee (Haddam Neck)

Docket No. 50-3 Indian Point Unit 1

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Docket No. 50-335 St. Lucie Unit 1

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Docket No. 50-321 Edwin I. Hatch Unit 1

Docket No. 50-366 Edwin I. Hatch Unit 2

Docket No. 50-315 D. C. Cook Unit 1